JMYT-329US DT04 Rec'd PCT/PTO 0 8 JUL **2004**

<u>Amendments to the Claims:</u> This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

- (Currently Amended) An electrocatalyst ink comprising one or more electrocatalyst
 metals and one or more proton-conducting polymers, characterised in that wherein the
 electrocatalyst ink further comprises particulate graphite which is present at a loading of
 1 to 40 weight % with respect to the weight of the electrocatalyst.
- (Original) An electrocatalyst ink according to claim 1, wherein the particulate graphite is present at a loading of 2 to 25 weight % with respect to the weight of the electrocatalyst.
- 3. (Currently Amended) An electrocatalyst ink according to claim 1-or claim 2, wherein the electrocatalyst metal is platinum.
- 4. (Currently Amended) An electrocatalyst ink according to any preceding claim 1, wherein the electrocatalyst is either a supported metal catalyst or an unsupported finely divided metal black.
- 5. (Original) An electrocatalyst ink according to claim 4, wherein the electrocatalyst metal is supported on a high surface area particulate carbon.
- 6. (Currently Amended) An electrocatalyst ink according to any preceding claim 1 further comprising a solvent, wherein at least 75 weight % of the solvent is water.
- 7. (Currently Amended) An electrocatalyst ink according to any preceding claim 1, wherein the solids content of the electrocatalyst ink is between 5 and 50 weight %.
- 8. (Currently Amended) An electrocatalyst ink according to any preceding claim 1, wherein the weight ratio of the electrocatalyst: proton-conducting polymer is between 1:1 and 10:1.
- 9. (Currently Amended) A process for preparing an electrocatalyst ink-according to any one of claims 1 to 8, said process comprising mixing one or more electrocatalyst materials with-the one or more proton-conducting polymers and-the a particulate graphite in a liquid medium, which may be aqueous or organic wherein the particulate graphite is

present at a loading of 1 to 40 weight % with respect to the weight of the electrocatalyst.

- 10. (Currently Amended) A process for preparing an electrocatalytic layer using an electrocatalyst ink according to-any one of claims 1-8 claim 1, said process comprising applying the electrocatalyst ink to a substrate.
- 11. (Currently Amended) A gas diffusion electrode comprising a gas diffusion substrate and an electrocatalytic layer prepared using an electrocatalyst ink according to any one of claims 1 to 8 claim 1.
- 12. Currently Amended) A catalyst coated membrane comprising a solid polymer membrane and an electrocatalytic layer prepared using an electrocatalyst ink according to-any one of claims 1 to 8 claim 1.
- 13. (Currently Amended) A membrane electrode assembly comprising an electrocatalytic layer prepared using an electrocatalyst ink according to any one of claims 1 to 8 claim 1.
- 14. (New) A process according to claim 9, wherein the liquid medium is aqueous.
- 15. (New) A process according to claim 9, wherein the liquid medium is organic.
- 16. (New) An electrocatalyst ink according to claim 1, wherein the electrocatalyst is a supported metal catalyst.
- 17. (New) An electrocatalyst ink according to claim 1, wherein the electrocatalyst is an unsupported finely divided metal black.